

Three new European species of the *Rhamphomyia* (s. str.) *melania* group (Diptera: Empididae)

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Three new European species of the *Rhamphomyia* (s. str.) *melania* group (Diptera: Empididae). - *Rhamphomyia* (s. str.) *danielsoni* sp. n. (Greece), *Rhamphomyia* (s. str.) *moceki* sp. n. (Albania), and *Rhamphomyia* (s. str.) *siffointei* sp. n. (France), are described and illustrated. *Rhamphomyia* (s. str.) *pseudocrinota* Strobl, 1909 is redescribed. Males of the group are keyed.

Keywords: *Rhamphomyia* (s. str.) - new species - Europe - taxonomy - key.

INTRODUCTION

The species of the *Rhamphomyia* (s. str.) *melania* group (as delimited by Barták, 2001: 316) are usually medium-sized to large (wing size from 3.7 to 6.5 mm), proepisternal depression setose, axillary angle acute, anal vein (A1) complete (or depigmented about middle), prosternum mostly bare (sparsely setose in *R. pseudocrinota* Strobl, 1909), halter dark, male cercus simple, without posterior cercus (= subcercal process) and without finger-like projection near dorso-cranial corner. Species of this group closely resemble species of *R. albosegmentata* group (see Barták, 2007). However, the male phallus in the representatives of the first group is narrowed apically and female hind femur is finely setose ventrally. On the other hand, the male phallus of the species of the latter group is broadened apically and female hind femur bears usually spine-like setae ventrally. There is a tendency of a reduction of the length of the costal seta (most notably in *R. nubigena* Bezzi, 1904 and *R. siffointei* sp. n.) and such specimens resemble species of the *R. ignobilis* group (as delimited by Barták, 2001: 314), but, the species of the latter group have yellow halter.

It is sometimes difficult to arrange a single female of the subgenus *Rhamphomyia* (s. str.) into particular group of species. Species of *R. (s. str.) melania* group have southern West Palaearctic distribution (reaching from Sierra Nevada and Pyrenees, across the Alps, Greece, and Israel up to Caucasus).

MATERIAL AND METHODS

The material studied is deposited in the following collections:

CULSP Czech University of Life Sciences, Prague

MHK Museum of East Bohemia, Hradec Králové

MHNG Muséum d'Histoire Naturelle, Geneva

NMA Naturhistorisches Museum, Stift Admont

ZML Zoological Museum, Lund University

The genitalia were macerated in 10 % KOH (24 hours, room temperature) and they were stored together with specimens in plastic microvials with glycerine. The morphological terms used here follow Merz & Haenni (2000) and Sinclair (2000). Abbreviations: T11, T21, T31 = length of fore, mid, hind tibia; B11, B21, B31 = length of fore, mid, hind basal tarsomere; B1w, B2w, B3w = width of fore, mid, hind basal tarsomere; M2/D = length of vein M2; greatest length of discal medial cell (discal cell); M3/Db = length of apical: preapical sections of vein CuA1; lw: ww = greatest length of wing: greatest width of wing. Length of antennal segments = length of first: 2nd: 3rd: style (in 0.01 mm scale). Characters marked with ? are unclear (e.g. width of face or frons may be difficult to measure when collapsed, or length of setae when broken).

SYSTEMATIC TREATMENT

Rhamphomyia (s. str.) *danielssoni* sp. n.

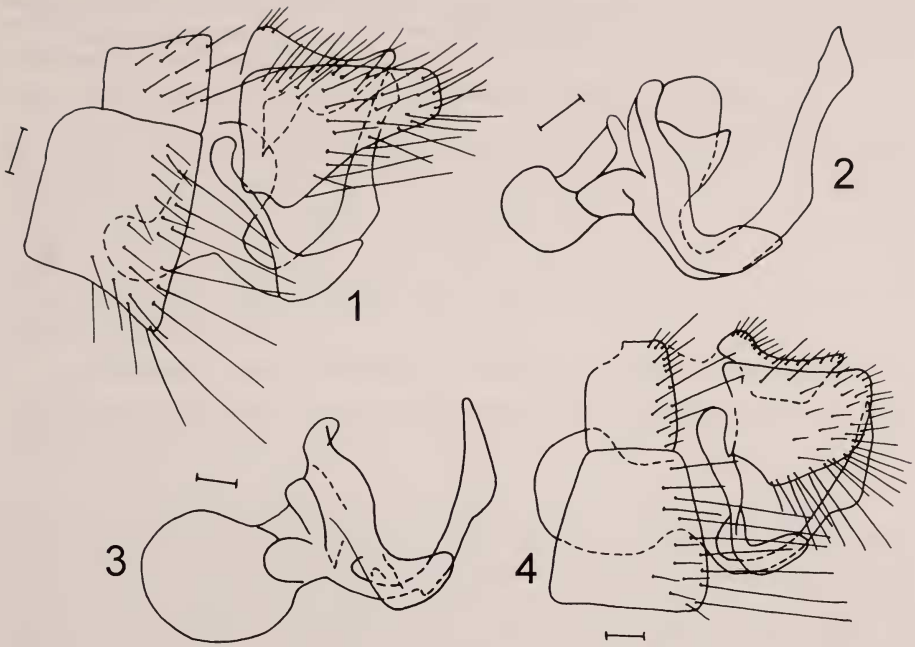
Figs 1-2

HOLOTYPE MALE: Greece, Evritania, Mt. Timfristos, ski centre, 1850 m, 10.vi.1982, loc. 21, leg. R. Danielsson (ZML).

PARATYPES: same data as for holotype, 1 male, 6 females (ZML, CULSP).

DIFFERENTIAL DIAGNOSIS: *Rhamphomyia* (s. str.) *danielssoni* sp. n. differs from remaining species of *R.* (s. str.) *melania* group in male by microtrichose abdomen, long setose fore and mid femora, short first antennomere, straight mid basal tarsomere and labrum shorter than head. Female can be distinguished from females of Palaearctic *Rhamphomyia* s. str. (with bare prosternum, biserial acrostichals, well developed costal seta, dark halter, unilobate occiput and normally developed cerci) in short first antennomere, polished abdominal segments 6-7 and hind femur lacking strong antero-ventral setae. The closest relative is probably *R. azauensis* Barták, 1983. The latter species which is only known from the Caucasus, however, has strong and well differentiated prescutellars, shorter dorsal setae on hind tibia and it is larger species (wing more than 5.0 mm). Moreover, there are differences in male genitalia between these two species: *R. azauensis* has broader tip of cercus and much narrower apex of phallus than *R. danielssoni* sp. n.

DESCRIPTION MALE: Eyes holoptic or very narrowly dichoptic, facets in ventral third of eye smaller than in dorsal two thirds. Frons (small areas just above antennae and below ocellar triangle) dark brownish-black, microtrichose, setae absent. Ocellar setae black and fine, slightly shorter than distance between front ocellus and base of antennae, ocellar triangle with 1-3 pairs of slightly shorter additional setae. Face black, brownish-grey microtrichose (with narrow polished stripe along lower margin), about 0.25? mm broad ventrally and 0.20? mm long, without setae. Occiput brown, microtrichose, with rather long and dense black setae, postocular row irregular. Antennae black, length of antennal segments = 14: 9: 35: 9, the longest setae on basal two segments about 0.20 mm long. Labrum black, polished, 2/3 as long as head is high. Palpus brown, long, densely covered with setae along whole length (the longest setae



FIGS 1-4

Rhamphomyia (s. str.) *danielssoni* sp. n. (1) Male terminalia (macerated). (2) Male phallus. *Rhamphomyia* (s. str.) *moceki* sp. n. (3) Male phallus. (4) Male terminalia (macerated). Lateral views, scale bars 0.1 mm.

about 0.30 mm long). Genae narrow, clypeus partly polished. Thorax brownish-black, dark brownish-grey microtrichose, without stripes, all setae black. Chaetotaxy: about 20 setae on proepisternum; 10 setae on proepisternal depression; prosternum bare; about 16 biserial, fairly fine acrostichals almost 0.40 mm long; about 30 irregularly tri-serial dorsocentrals subequally long as acrostichals, prescutellars scarcely differentiated; intrahumeral, posthumeral, notopleural, praealar and supraalar setae scarcely differentiated from many (30-40 on each side of mesoscutum) setae lateral of dorsocentrals; postpronotal seta scarcely differentiated from about 10 additional setae; 1 long and several small postalars; 6-10 scutellars; laterotergite with black setae. Legs including coxae brown, microtrichose, with black setae, one long seta present in comb at tip of hind tibia. Fore femur with rather dense and irregular rows of anteroventral and posteroventral setae slightly longer than femur is deep, dorsal setae slightly shorter. Fore tibia with 4-5 anterodorsal and 8-10 posterodorsal setae up to twice as long as tibia is deep, ventral setae slightly shorter than tibia is deep. Mid femur rather densely covered with anterodorsal, anteroventral and posteroventral setae about 1.5 times as long as femur is deep. Mid tibia with 3-4 pairs of anterodorsal and posterodorsal setae about twice as long as tibia is deep, 1-2 anteroventrals and 2-4 posteroventrals slightly longer than tibia is deep. Hind femur with irregularly arranged anteroventral and posteroventral setae in basal third of femur twice as long as femur is deep, slightly

shorter in apical part of femur, in apical third with several long dorsal and anterodorsal setae. Hind tibia with several anterodorsal and more numerous posterodorsal setae almost three times as long as tibia is deep, ventral setae slightly shorter than tibia is deep. Basal tarsomeres of fore and mid legs thin and short setose, with short ventral spines. T1l: B1l = 2.3-2.7, B1l: B1w = 5.7-6.0, T2l: B2l = 2.6-2.7, B2l: B2w = 5.3-6.2. Basal tarsomere of hind leg thin, with several dorsal setae almost three times as long as basitarsus is deep, T3l: B3l = 2.3, B3l: B3w = 6.5-9.2. Wing clear or slightly brownish, stigma brownish, veins brown, anal vein (A1) complete or depigmented in middle part. Costal seta present. axillary angle acute (70°). M2/D = 1.3-1.8, M3/Db = 3.0-3.7, lw: ww = 2.8-2.9. Halter brown; calypter brown with dark fringes. Abdomen brownish-black, microtrichose, all setae dark. Hind marginal setae on sides of tergites subequally long as segments, discal setae slightly shorter than marginals on segments 2-4 and much shorter than marginals on segments 5-7. Dorsum of tergites with short setae, 1st sternite covered with setae. Terminalia as in Figs 1-2: cercus narrowly trapezoid; epanthrium elongated, with rather long setae even on dorsal surface; phallus slightly broadened at extreme tip. Length of body 3.7-4.2 mm, wing 3.8-4.2 mm.

DESCRIPTION FEMALE: Similar to male but with the following differences. Eyes broadly dichoptic, all facets subequal in size. Frons 0.20 mm long and 0.23 mm broad, with 5-6 rather long setae (up to 0.13 mm) on each side. Face 0.13 mm long and 0.30 mm broad below. Length of antennal segments = 13: 8: 35: 9. Labrum slightly shorter than head is high. Occiput with setae much shorter than in male. Genae polished; clypeus mostly microtrichose. Thorax with setae much shorter and less numerous than in male (both acrostichals and dorsocentrals less than 0.15 mm long), 2-3 notopleurals better differentiated than in male. Fore femur with anteroventral and posteroventral setae about as long as femur is deep. Fore tibia with 2-3 pairs of dorsal setae slightly longer than tibia is deep. Mid femur with anteroventral and posteroventral setae slightly shorter than femur is deep. Mid tibia with anterodorsal, posterodorsal, anteroventral and posteroventral setae (3-5 in each row) about as long as tibia is deep. Hind femur with fine ventral setae shorter than femur is deep, with some longer setae dorsally near the tip. Hind tibia with 4-5 pairs of anterodorsal and posterodorsal setae up to twice as long as tibia is deep, ventral setae short (1-2 short anteroventrals differentiated). Basal tarsomeres of all legs thin and short setose, with short ventral spines, hind one with 1-2 setae dorsally twice as long as this tarsomere is deep. T1l: B1l = 2.6, B1l: B1w = 4.6-4.8, T2l: B2l = 2.4-2.5, B2l: B2w = 5.3-5.4, T3l: B3l = 2.1-2.2, B3l: B3w = 7.0-7.9. Wing somewhat darker brownish than in male. M2/D = 1.3-1.5, M3/Db = 3.0-3.2, lw: ww = 2.8-3.0. Abdomen black, microtrichose, segments 6-7 mostly polished (both tergites and sternites). Hind marginal setae on segments 2-4 1/2-2/3 as long as their segments, on the following segments slightly shorter, discal setae shorter than marginals. Dorsum of abdomen with very short setae. Length of body: 3.9-4.2 mm, wing: 3.7-4.2 mm.

DERIVATIO NOMINIS: The species is named in honour of the collector of the types, Roy Danielsson (Zoological Museum, University of Lund).

DISTRIBUTION: Greece. Province of Evrytania (= Evritania), Pindus mountain range.

DATES OF OCCURRENCE: June.

***Rhamphomyia* (s. str.) *moceki* sp. n.**

Figs 3-4

HOLOTYPE: Male; Albania bor., Prokletie Mts. Boge, 1500 m, meadow, Fagetum, 17.vi.1994, leg. B. Mocek (MHK).

PARATYPES: same data as for holotype, 3 females (MHK and CULSP).

DIFFERENTIAL DIAGNOSIS: The new species differs from all species of *Rhamphomyia* (s. str.) *melania* group (besides terminalia) by its elongated first antennal segment, very long setose abdomen and broad and polished genae. The absence of ventral setae on hind femur in female and presence of them in male is also striking feature this species. As a consequence of this sexual dimorphism the male of *Rh. moceki* belongs according to Frey (1954-56) to the subgenus *Alpinomyia* and the female to the subgenus *Eorhamphomyia*.

DESCRIPTION MALE (HOLOTYPE): Eyes holoptic, facets in ventral half of eye smaller than in dorsal half. Frons (small areas just above antennae and below ocellar triangle) black, grey microtrichose, setae absent. Ocellar setae broken in the single male at hand. Face black, grey microtrichose, about 0.30? mm broad below and 0.25 mm long, setae absent. Occiput black, grey microtrichose, with rather long black setae, postocular row almost complete. Antennae black, length of antennal segments = 23: 8: 50: 12, the longest setae on basal two segments about 0.25 mm long. Labrum brownish-black, polished, slightly longer than head is high. Palpus brown, long, densely covered with setae along whole length (the longest about 0.40 mm long). Genae very broad (at least 0.06 mm) and polished, clypeus microtrichose. Thorax black, dark, rather brownish-grey microtrichose, without stripes, all setae black. Chaetotaxy: about 20 setae on proepisternum; 6 setae on proepisternal depression; prosternum bare; about 22 biserial, fairly fine acrostichals about 0.30 mm long; about 30 irregularly 2-3 serial dorsocentrals ending in 2-3 stronger prescutellars, the presutural area of mesoscutum with about 20 similar setae; intrahumeral and posthumeral not differentiated; postpronotal seta scarcely distinguishable from several similar setae; 3 notopleurals and 4-6 long setae in front part of notopleuron; 3-4 supraalar and 3-4 setae on prealar area; 1 long and 1 small postalar; 4 long and strong and 1-2 additional smaller scutellars; laterotergite with black setae. Legs including coxae black, concolorous with pleura, microtrichose, with black setae. One long seta present in comb at tip of hind tibia. Fore femur with irregular row of anteroventral setae up to as long as femur is deep and with similar row of rather longer posteroventrals up to twice as long as femur is deep, anterodorsal setae similar to anteroventrals but dorsal setae short. Fore tibia with 3-4 pairs of anterodorsal and posterodorsal setae about twice as long as tibia is deep, dense ventral setae short. Mid femur with irregular row of short anteroventral setae less than half as long as femur is deep, posteroventrals up to twice as long as femur is deep (setae irregularly arranged in basal part of femur). Mid tibia with 3 anterodorsal and 3 posterodorsal setae up to twice as long as tibia is deep and with regular row of very short anteroventral spines, posteroventral setae more irregularly arranged but equally short as anteroventrals. Hind femur with complete row of anteroventral setae and in apical third also anterodorsal setae (up to as long as femur is deep), posteroventral setae in basal half of femur nearly twice as long. Hind tibia thin, with 5-6 pairs of anterodorsal and posterodorsal setae, the longest twice as long as tibia is deep, sparse ciliation between setae about as long as tibia is deep, ventral setae very short. Basal

tarsomeres of fore and mid legs thin and short setose, with short ventral spines, T1l: B1l = 2.8-2.9, B1l: B1w = 6.2-6.3, T2l: B2l = 3.6-3.7, B2l: B2w = 5.6. Basal tarsomere of hind leg thin, with several dorsal setae up to three times as long as this tarsomere is deep, T3l: B3l = 2.4, B3l: B3w = 7.6. Wing light brownish, stigma darker, veins brown, anal vein (A1) complete. Costal seta present, axillary angle acute (70°). M2/D = 1.5, M3/Db = 3.8, lw: ww = 2.5? Halter black, basal part of stem yellow; calypter brown with dark fringes. Abdomen brownish-black, microtrichose, with dark setae. Hind marginal setae on sides of tergites slightly longer than segments, discal setae slightly shorter than marginals. Dorsum of tergites with very short setae. The 1st sternite with setae on sides. Terminalia as in Figs 3-4. Cercus trapezoid; phallus broadened subapically and sharply tipped at apex; epandrium with long setae along ventral margin; hypandrium short and broad. Length of both body and wing 5.0 mm.

DESCRIPTION FEMALE: Similar to male but with the following differences. Eyes broadly dichoptic, all facets subequal in size. Frons 0.18 mm long and 0.26 mm broad, with 2-3 rather long setae on each side. Ocellar setae about as long as frons. Face 0.40 mm long and subequally broad below. Length of antennal segments = 35: 9: 38: 15. Labrum 1.4 times as long as head is high. Occiput with shorter setae than in male. Thorax with setae slightly shorter and less numerous than in male. Fore and mid femur short setose. Fore tibia with a few setae dorsally shorter than tibia is deep. Mid tibia with setae shorter than tibia is deep. Hind femur short setose, some longer setae occur posteriorly about base and anterodorsally near the tip, ventral surface of femur virtually bare except a single preapical anteroventral seta. Hind tibia with 3 anterodorsal and 3 posterodorsal setae slightly longer than tibia is deep, ventral setae short, sometimes short single anteroventral seta present. All basal tarsomeres thin and short setose, with short ventral spines, hind one with 1-2 setae dorsally twice as long as this tarsomere is deep, T1l: B1l = 3.2, B1l: B1w = 5.0, T2l: B2l = 3.3, B2l: B2w = 5.0, T3l: B3l = 2.3, B3l: B3w = 8.0. Wing somewhat darker brownish than in male, basal veins conspicuously thick and dark brown, anal vein (A1) slightly weakened about middle. M2/D = 1.4-1.5, M3/Db = 3.6-4.3, lw: ww = 2.9-3.0. Abdomen black, microtrichose, segments 6-8 on basal half polished. Hind marginal setae on segments 2-5 longer than segments but on the following segments very short, discal setae subequally long as marginals. Dorsum of abdomen very short setose. Length of body: 5.0 mm, wing: 4.7-5.0 mm.

DISTRIBUTION: Albania.

DATES OF OCCURRENCE: June.

DERIVATIO NOMINIS: the species is named in honour of my friend and the collector of the types, Dr. Bohuslav Mocek (Museum Hradec Králové).

***Rhamphomyia* (s. str.) *siffointei* sp. n.**

Figs 5-6

HOLOTYPE MALE: France, Col de Tourniol, 1 050 m, 26.v.2005, leg. M. Barták (CULSP).

PARATYPES: same data as the holotype, 52 males, 6 females (CULSP, MHNG), France, Vassieux-en-Vercors, 10.vi.1981, 2 males, leg. R. Siffointe (MHNG, coll. R. Siffointe)

DIFFERENTIAL DIAGNOSIS: The new species differs from remaining species of *Rhamphomyia* (s. str.) *melania* group except *R. nubigena* Bezzi, 1904 by its short costal seta (less than twice as long as nearby costal ciliation). The male of *R.* (s. str.)

siffointei sp. n. differs from remaining West Palaearctic *Rhamphomyia* (s. str.) in the characteristic shape of epandrium and phallus. The sharply acute tip of the epandrium resembles that of *R.* (s. str.) *wagneri* Barták, 1998 known from Dubrovnik (Croatia). However, the latter has pale yellow halter and different shape of both phallus and cercus. Female of *R.* (s. str.) *siffointei* sp. n. may be mistaken either for *R. chionopectera* Bezzi, 1904 or *R. anthracinella* Strobl, 1898. However, the former species has much paler wings and the latter much longer abdominal setae.

DESCRIPTION MALE: Eyes holoptic, facets in ventral half of eye smaller than in dorsal half. Frons (small areas just above antennae and below ocellar triangle) dark brownish-black, microtrichose, bare. Ocellar setae black and fine, scarcely one third as long as frons, accompanied with 1-2 pairs of similar or somewhat shorter setae. Face black, brownish-grey microtrichose, about 0.28 mm broad ventrally and subequally long, without setae. Occiput black, light grey microtrichose, with black setae, postocular row complete but irregular in ventral part, dorsal postocular setae distinctly bent forward. Antennae black, length of antennal segments = 15: 8-9: 55-60: 9-10, the longest setae on basal two segments about 0.20 mm long. Labrum black, polished, about as long as head is high. Palpus brown, short, with fine setae along whole length (the longest about 0.25 mm long). Genae narrow and microtrichose, clypeus microtrichose except dorsalmost part. Thorax black, light grey microtrichose, with three slightly darker and sometimes poorly visible brownish stripes on lines of acrostichals and dorsocentrals. All setae black. Chaetotaxy: about 10-15 setae on proepisternum; 4-8 setae on proepisternal depression; prosternum bare; about 24-30 biserial, rather fine acrostichals 0.20-0.25 mm long; multiserial dorsocentrals subequally long as acrostichals (or slightly longer), ending in strong and long prescutellars; lateral parts of mesoscutum in presutural area and front part of notopleura covered with many (about 20 on each side) setae similar to acrostichals or dorsocentrals; intrahumeral not differentiated, posthumeral present and strong, 3 strong notopleurals, 1-2 supraalar setae, 4-6 prealar setae and 2-3 setae between prealars and supraalars; 1 postpronotal and 10-15 smaller setae; 1 long and several small postalars; 4 scutellars, sometimes with 1-2 additional setae; laterotergite with black setae. Legs including coxae brownish black, microtrichose, with black setae. A long seta present in comb at tip of hind tibia. Fore femur with short setae, anteroventrals and posteroventrals very fine and scarcely half as long as femur is deep, dorsal setae slightly stronger. Fore tibia with fine posterodorsal setae slightly longer than tibia is deep, ventral setae very short and fine, anterodorsals scarcely differentiated. Mid femur with similar short and fine setae as fore femur. Mid tibia with 4-6 strong anterodorsals three times as long as tibia is deep (the longest preapical one up to 0.50 mm long), posterodorsals and posteroventrals slightly shorter than anterodorsals, anteroventrals very short. Hind femur with 2-3 anteroventrals and the same number of posteroventrals in submedian position slightly longer than femur is deep and with a row of 4-5 subequally long anterodorsals in apical half of femur, otherwise with short setae. Hind tibia with about 8 pairs of setae dorsally about as long as tibia is deep, ventral setae shorter. Basal tarsomere of fore leg thin, short setose, T1l: B1l = 2.4-2.5, B1l: B1w = 6.7-7.3, basal tarsomere of mid leg thin, short setose, with rather long ventral spines, T2l: B2l = 2.9-3.0, B2l: B2w = 5.6-6.4. Basal tarsomere of hind leg about as broad as tip of hind tibia, with 3-4 pairs of dorsal

setae somewhat longer than this tarsomere is deep, T3l: B3l = 1.9-2.0, B3l: B3w = 4.7-5.9. Wing clear or slightly brownish, stigma brown, veins brown, anal vein (A1) complete. Costal seta only slightly longer than nearby setae, axillary angle sharply acute (50°). M2/D = 1.5-1.7, M3/Db = 2.9-3.7, lw: ww = 2.5-2.8. Halter brown; calypter yellowish-brown with dark fringes. Abdomen black (terminalia almost brown), light grey microtrichose. All setae dark. Hind marginal setae on sides of tergites slightly longer than their segments, discal setae shorter than marginals. Dorsum of tergites with rather long setae; 1st sternite bare. Terminalia as in Figs 5-6. Cercus broad and long; epandrium short setose, with sharply pointed upcurved tip; hypandrium broadened; phallus peculiarly S-shaped near the tip. Length of body 4.9-5.6 mm, wing 5.5-6.1 mm.

DESCRIPTION FEMALE: Similar to male but with the following differences. Eyes broadly dichoptic, all facets subequal in size. Frons 0.28 mm long and subequally broad, with about 4-6 setae on each side. Ocellar setae 2/3 as long as frons. Face subequally long as frons, 0.35 mm broad below. Length of antennal segments = 19: 10: 52: 8. Labrum slightly longer than head is high. Occiput with setae much shorter than in male. Clypeus polished. Thorax similarly coloured as male, but dark stripes less visible, thoracic setae much shorter than in male (both acrostichals and dorsocentrals 0.15 mm long) and less numerous. Both fore and mid femur short setose. Fore tibia with several setae dorsally shorter than tibia is deep. Mid tibia with scarcely differentiated anterodorsal, posterodorsal and posteroventral setae, all shorter than tibia is deep. Hind femur with fine dorsal setae about as long as femur is deep on basal third and with several anterodorsals in apical third, ventrally with only minute setae. Basal tarsomeres of all legs thin and short setose dorsally and with short ventral spines, hind one with several setae dorsally as long as this tarsomere is deep. T1l: B1l = 2.2-2.4, B1l: B1w = 6.5-6.9, T2l: B2l = 2.4-3.0, B2l: B2w = 5.0-5.5, T3l: B3l = 2.2-2.4, B3l: B3w = 7.6-8.0. Wing dark brown. M2/D = 1.5-1.6, M3/Db = 2.6-2.9, lw: ww = 2.3-2.5. Abdomen brownish-black, microtrichose. Hind marginal setae scarcely ¼ as long as their segments (on segment 2 somewhat longer), discal setae subequally long. Dorsum of abdomen with very short setae. Length of body: 6.1-6.9 mm, wing: 5.8-6.5 mm.

DISTRIBUTION: French Alps, northernmost part of the department Drôme, mountains of the Vercors.

DATES OF OCCURRENCE: May, June.

DERIVARIO NOMINIS: the species is named in honour of the collector of the first specimens at hand, Mr. René Siffointe.

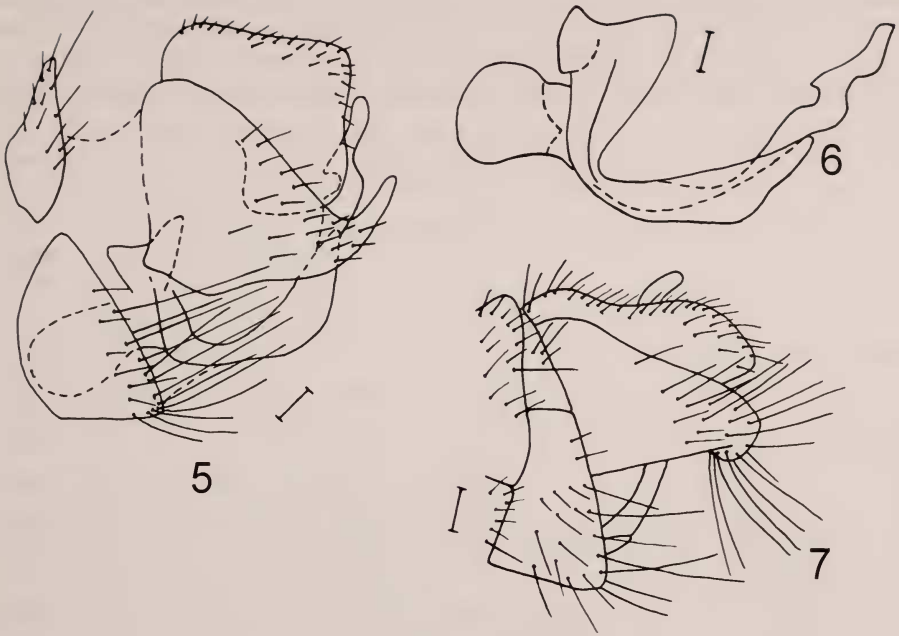
***Rhamphomyia* (s. str.) *pseudocrinita* Strobl in Strobl & Czerny, 1909**

Fig. 7

Strobl in Strobl & Czerny, 1909: 170.

MATERIAL STUDIED: Holotype; male; Spain, "Genital (Sr Nevada) 2/5 ♂ Str." (NMA).

REDESCRIPTION MALE: Eyes holoptic, facets in ventral half of eye smaller than in dorsal half. Frons (small areas just above antennae and below ocellar triangle) light brownish-grey, microtrichose, bare. Ocellar setae black and fine, half as long as frons, accompanied by 3 pairs of slightly shorter setae. Face black, light grey microtrichose,



FIGS 5-7

Rhamphomyia (s. str.) *siffointei* sp. n. (5) Male terminalia (macerated). (6) Male phallus. *Rhamphomyia* (s. str.) *pseudocrinita* Strobl. (7) Male terminalia. Lateral views, scale bars 0.1 mm.

more than 0.17? mm broad below and more than 0.15? mm long, bare. Occiput black, light grey microtrichose, densely covered with rather long black setae, postocular row irregular but complete. Antennae black (both basal antennomeres brown), length of antennal segments = 15: 10: 48: 12, the longest setae on basal two segments about 0.20 mm long. Labrum black, polished, 2/3 as long as head is high. Palpus brown, moderately long, densely covered with setae along whole length (the longest setae about 0.30 mm long). Genae narrow, clypeus microtrichose. Thorax brownish-black, light grey microtrichose, with two broad brown stripes on lines of dorsocentrals and with two similar but much narrower stripes on sides of mesoscutum reaching from posthumeral to supraalars. All thoracic setae black. Chaetotaxy: 14 setae on proepisternum; about 10 setae on proepisternal depression; prosternum with 4-6 setae on each side; about 30 biserial, fairly fine acrostichals; more than 40 irregularly 4-serial dorsocentrals ending in two stronger prescutellars (both acrostichals and dorsocentrals about 0.20 mm long in middle of rows); 5-6 subequal setae in intrahumeral area, 1 strong posthumeral accompanied by 6 similar setae, 3 strong notopleurals and 5-6 fine setae in front part of notopleura, two strong supraalars and 5-6 fine setae in prealar area; one strong and many weaker postpronotal setae; 1 long and several small postalars; 4-6 scutellars; laterotergite with black setae. Coxae blackish brown, grey microtrichose, legs brown, microtrichose, legs (including coxae) black setose. A long seta present in comb at tip

of hind tibia. Fore femur with slightly irregular rows of anteroventral and posteroventral setae subequally long as femur is deep, dorsal setae shorter. Fore tibia with 4-5 pairs of rather strong anterodorsal and posterodorsal setae slightly longer than diameter of tibia and with 1-2 submedian similar posterior setae, ventral setae very short. Mid femur with two rows of rather strong setae ventrally, those forming anteroventral row rather short (one third as long as femur is deep), those in posteroventral row short in basal half and longer in apical half of femur, anterodorsal setae somewhat longer and fine. Mid tibia with 4 long anterodorsal setae (the preapical seta the longest, about 0.40 mm long) and with another 4-5 strong but shorter and irregularly arranged setae in anterodorsal or even dorsal position) situated only in basal part of tibia (absent in apical half), 2-3 anteroventrals and 1-2 posteroventrals up to twice as long as diameter of tibia. Hind femur without setae ventrally (only with fine "pilosity" throughout its length), dorsal setae short. Hind tibia with 5-6 pairs of dorsal setae slightly longer than diameter of tibia, ventral setae short, one anteroventral in apical third of tibia differentiated. Basal tarsomere of fore leg thin and short setose, T1l: B1l = 2.2-2.3, B1l: B1w = 5.2-6.2, basal tarsomere of mid leg thin, short setose, with short ventral spines, T2l: B2l = 2.5-2.8, B2l: B2w = 5.0-6.3, basal tarsomere of hind leg thin, with 1-2 setae dorsally (beside preapicals) slightly longer than diameter of this tarsomere and with short ventral spines, T3l: B3l = 2.0-2.3, B3l: B3w = 7.2-9.0. Wing light brown, stigma brown, veins brown, anal vein (A1) complete. Costal seta long, axillary angle deeply incised (30°). M2/D = 1.2-1.3, M3/Db = 2.6-2.8, lw: ww = 2.8-2.9. Halter light brown; calypter yellow with dark fringes. Abdomen brownish-black, microtrichose (light grey in lateral view, brownish grey in dorsal view), all setae dark. Hind marginal setae on sides of tergites 2-4 slightly longer than their segments, on tergite 5 slightly shorter and on tergites 6-7 short, discal setae on tergites 2-3 slightly shorter than marginals, on the following segments much shorter. Dorsum of tergites with moderately long setae; 1st sternite setose along whole length. Terminalia as in Fig 7. Cercus twice as long as high; epandrium covered with rather long setae ventrally near the tip; phallus thin and bowed near the tip; hypandrium simple and short. Length of body 4.5 mm, wing 4.9 mm.

FEMALES: Unknown.

REMARKS: The species was described from a single male from Genital, Sierra Nevada (Spain) which is still the only known specimen. There is one male specimen in NMA, apparently the holotype, well preserved (only left third antennomere missing), labelled "Rhamphomyia laevipes Fall. Dr. E. Lindner determ. 1949" "Holotypus" and with another label beside (separately from specimen) "Rh. pseudocrinita m. Genital (Sr. Nevada) 2/5 ♂ Str.". *R. (s. str.) pseudocrinita* may be distinguished from other species of not only *R. (s. str.) melania* group but also from any other known West Palaearctic *Rhamphomyia* s. str. by its setose prosternum and dark halter. Females remain unknown. The authors suppose it may also be separated from morphologically similar species by both characters explained above (which are probably not sexually dimorphic). Interestingly, *R. (s. str.) pseudocrinita* is remarkably similar to *R. laevipes*. In addition to the two above mentioned important differentiating characters, both species differ only in details: *R. laevipes* has phallus almost straight near apex, whereas *R. pseudocrinita* has phallus bent near apex almost as in *R. czizeki* Barták,

1982 (see Barták, 1982, fig. 1b); basal tarsomere of fore leg is longer setose dorsally in *R. laevipes* than in *R. pseudocrinita*.

KEY TO MALES OF RHAMPHOMYIA (S. STR.) MELANIA GROUP OF SPECIES

- 1a Prosternum with several setae (Spain)
. *R. pseudocrinita* Strobl in Strobl & Czerny, 1909
- 1b Prosternum without setae 2
- 2a Costal seta absent or present, in the later case at most twice as long as
remaining costal setation 3
- 2b Costal seta present, more than twice as long as remaining costal setation . . . 4
- 3a (2) Epandrium without sharp tip (Austrian, Italian and Swiss Alps)
. *R. nubigena* Bezzi, 1904
- 3b Epandrium with sharp, upcurved tip (Fig. 5) (French Alps) . . *R. siffointei* sp. n.
- 4a (2) Basitarsus of mid leg curiously bent (German Alps)
. *R. longirostris* (Lindner, 1972)
- 4b Basitarsus of mid leg straight as usually 5
- 5a (4) Labrum at least 1.5 times as long as head is high. (Additional character:
hind femur with anteroventral setae subequally long throughout)
(Austrian, Italian and Swiss Alps) *R. melania* Becker, 1887
- 5b Labrum at most slightly longer than head is high 6
- 6a (5) The first antennal segment elongated, almost three times as long as the
second one. Abdomen microtrichose, hind marginal setae on sides of
tergites longer than their segments. Genae broad (more than 0.06 mm)
and polished. The longest anteroventral setae on hind femur situated
about middle of femur, and shorter towards base and apex (Albania) . . .
. *R. moceki* sp. n.
- 6b The first antennal segment at most twice as long as the second one.
Combination of other characters different 7
- 7a (6) Abdomen subpolished. Mid femur with very short anteroventral setae
(about half as long as femur is deep) (Israel) . . . *R. hermonensis* Barták, 2009
- 7b Abdomen microtrichose. Mid femur with anteroventral setae at least as
long as femur is deep 8
- 8a (7) Prescutellar dorsocentrals strong and well differentiated. Hind tibia
dorsally with setae slightly longer than tibia is deep. Larger species
(wing more than 5.0 mm). Mid tibia without anteroventral setae
(Caucasus) *R. azauensis* Barták, 1983
- 8b Prescutellar dorsocentrals scarcely differentiated. Hind tibia dorsally
with setae three times as long as tibia is deep. Smaller species (wing less
than 4.2 mm). Mid tibia with anteroventral setae (Mountains of
Mainland Greece) *R. danielssoni* sp. n.

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